

BookletChart™

Bering Sea – Northern Part

NOAA Chart 514

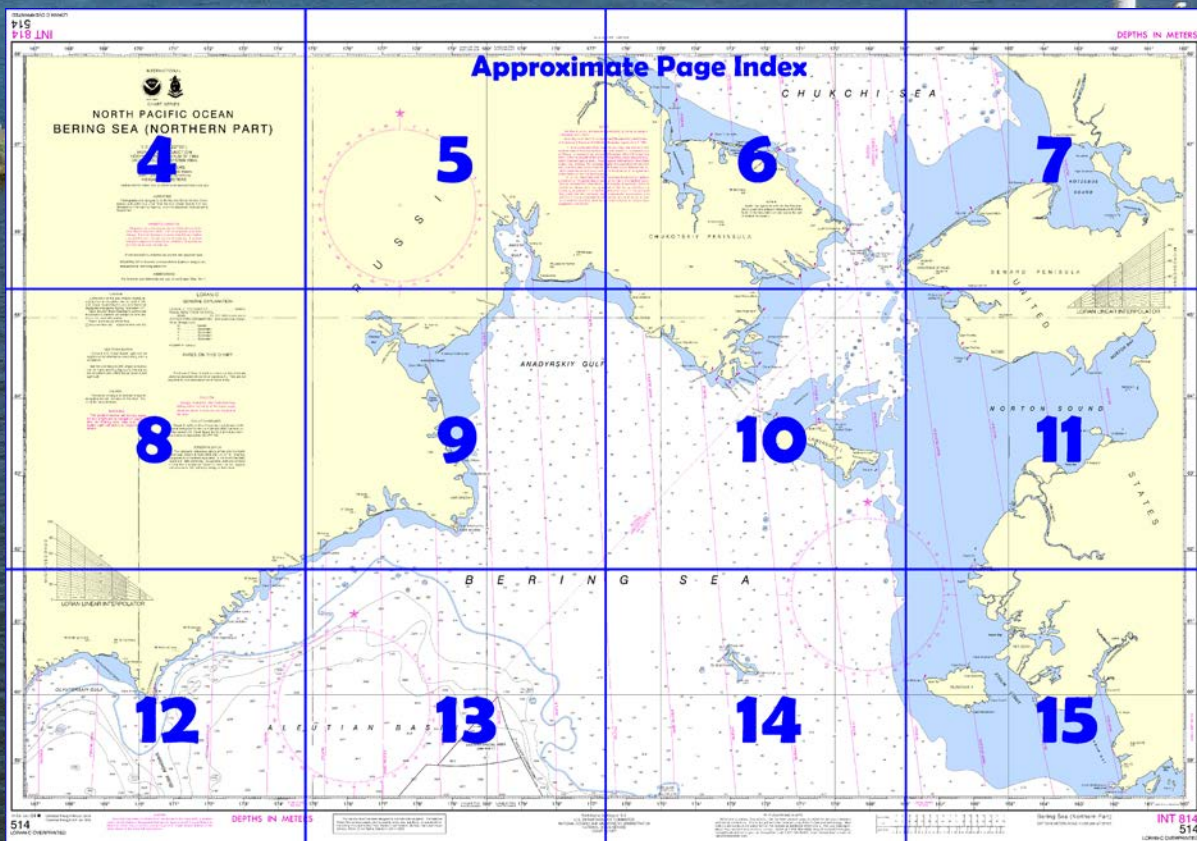


A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

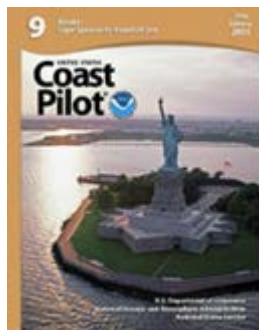
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/coastpilot_w.php?book=9.



(Selected Excerpts from Coast Pilot)

The S limit of the **Bering Sea** is a line running from Kabuch Point (54°49'N., 163°22'W.) on the Alaska Peninsula through the Aleutian Islands to the S extremes of the Komandorski Islands and on to Cape Kamchatka in such a way that all the narrow waters between Alaska and Kamchatka are included in the sea. The N limit is the Bering Strait.

Much of this area has been only partially surveyed, and the charts must not be relied

upon too closely, especially near shore. The currents are much influenced by the winds and are difficult to predict; dead reckoning is uncertain, and safety depends upon constant vigilance. The chapter area is entirely within the 100-fathom-depth curve, which

extends NW from Unimak Pass and passes to the SW of the Pribilof Islands. Depths vary more or less uniformly in the open sea except near the off-lying islands, which are volcanic and rocky and range in height to more than 2,000 feet.

From the head of Bristol Bay to Norton Sound, shoals or banks formed by river deposits extend many miles from the mainland, in some places completely out of sight. Kuskokwim and Yukon Rivers are the principal drainage systems along this stretch of coast. As fog and thick weather are common during the navigation season, coasting vessels are advised to sound constantly and to stay in depths greater than 10 fathoms unless feeling their way in to the land.

Navigational aids are few, and all are seasonal. The rocky islands and the rocky parts of the mainland are frequented by thousands of birds whose constant cries may serve to indicate the approach to these places in thick weather. Port facilities are rare, and most of the villages scattered along the coast lighter their supplies from vessels anchored offshore.

Good water can always be found in the vicinity of high land.

The navigation season depends largely upon ice conditions, discussed later. During the winter, the ice and snow along the shore, as well as inland, are suitable for travel by dog team over many miles of established trail. Tractors could be driven over long stretches of this beach area when the lakes and protected bays are frozen solid enough to support them. Airplanes equipped with skis can also operate in winter from many points along the coastal and inland areas.

Currents.—Strong tidal currents flow through the Aleutian Islands passes, setting into the Bering Sea on the flood and into the North Pacific Ocean on the ebb. Observed velocities have exceeded 8 knots in some of the passes, but the decrease is rapid once the passes are cleared. The tidal currents set N and S along the Bering coast and into and out of the various bays. The periodic tidal flow along the coast is completely masked at times by wind currents. In constricted bays the currents may have considerable velocities. The tidal current has an average velocity of 0.5 to 1 knot at the off-lying islands.

Most reports indicate that during the open season there is a general drift N along the Bering coast and thence through the Bering Strait into the Arctic Ocean. During the winter, ice moves from the Arctic into the Bering Sea. The N drift is probably not more than 0.5 knot in the open sea well N of the Aleutian passes. Wind and atmospheric pressure are said to materially affect the drift. In a disturbed area the current will generally set with a strong wind or toward an atmospheric depression, and such a current may serve as a storm warning.

Along the N side of Unimak Island, the currents are fairly strong and generally parallel the coast. They attain a maximum velocity of 2 knots 1 mile off Cape Mordvinof and probably do not exceed 2.5 knots anywhere along this coast. Velocities have been estimated at 2 to 2.5 knots as far as 12 miles from shore in depths of about 40 fathoms. Between St. Matthew Island and Nunivak Island, the current sets NW with prevailing NE winds during the navigation season and NE with NW or SW winds. This N current continues and increases between St. Lawrence Island and the mainland, being stronger toward the mainland N of the **Yukon River** where it has a velocity of about 1 knot except in early summer when the Yukon freshets may increase it to 2 knots or more. A strong N current, amounting at times to 2.5 knots, has been observed setting on the Yukon flats. The current sets N across Norton Sound to Sledge Island and is strongly marked along the coast between Sledge Island and Bering Strait.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Juneau	Commander	
	17th CG District	(907) 463-2000
	Juneau, Alaska	

Table of Selected Chart Notes

Corrected through NM Jan. 24
Corrected through NM Jan. 24

CAUTION

Danger, Prohibited, and Restricted Area falling within the limits of the larger scale charts are shown thereon and not repeated on this chart.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

See National Geospatial-Intelligence Agency List of Lights and Fog Signals for information not included in the United States Coast Guard Light List.

NOTE B

Radio navigational aids on the Russian Arctic coast and adjacent islands north of the Arctic Circle have been omitted due to the lack of reliable information.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution. Station positions are shown thus:
○ (Accurate location) ◦ (Approximate location)

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

International boundaries as shown are approximate.

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9990.....99,900 Microsecond
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M..... Master
W..... Secondary
X..... Secondary
Y..... Secondary
Z..... Secondary

EXAMPLE: 9990-X

RATES ON THIS CHART

9990-X 9990-Y 9990-Z

The Loran-C lines of position shown on this chart are based on assumed all sea water signal paths. They are not adjusted for overland signal transmission delay.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

ABBREVIATIONS

For Symbols and Abbreviations see United States Chart No. 1.

DOUBTFUL DATA: Reported but unconfirmed depths or dangers are indicated by an encircling dotted line.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the U.S. Coast Guard, National Geospatial-Intelligence Agency, and the Japanese Hydrographic Department.

MAGNETIC VARIATION

Magnetic variation curves are for 2004 derived from 2000 World Magnetic Model and accompanying secular change. If annual change is in same direction as variation it is additive and the variation is increasing. If annual change is opposite in direction to variation it is subtractive and the variation is decreasing.

NOTES

Maritime boundary provisionally applied pending formal exchange of instruments of ratification.

According to Article 3 of the Agreement Between the United States of America and Russia on the Maritime Boundary, signed June 1, 1990:

"1. In any area east of the maritime boundary that lies within 200 nautical miles of the baseline from which the breadth of the territorial sea of Russia is measured but beyond 200 nautical miles of the baseline from which the breadth of the territorial sea of the United States is measured ("eastern special area"), Russia agrees that henceforth the United States may exercise the sovereign rights and jurisdiction derive exclusive economic zone jurisdiction that Russia would otherwise be entitled to exercise under international law in the absence of the agreement of the Parties on the maritime boundary.

3. To the extent that either Party exercises the sovereign rights and jurisdiction in the special area or areas on its side of the maritime boundary as provided for in this Article, such exercise of sovereign rights and jurisdiction derives from the agreement of the Parties and does not constitute an extension of its exclusive economic zone. To this end,

167° 168° 169° 170° 171° 172° 173° 174° 175°

68°

67°

66°

65°

INTERNATIONAL



CHART SERIES

NORTH PACIFIC OCEAN BERING SEA (NORTHERN PART)

1:3,500,000 (22°30')
MERCATOR PROJECTION
NORTH AMERICAN DATUM OF 1983
(WORLD GEODETIC SYSTEM 1984)

DEPTHS IN METERS
Depth contour interval, 1000 meters
(under 1000, at 30 and 200 meters)
HEIGHTS IN METERS

Additional information can be obtained at nauticalcharts.noaa.gov.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the U.S. Coast Guard, National Geospatial-Intelligence Agency, and the Japanese Hydrographic Department.

MAGNETIC VARIATION

Magnetic variation curves are for 2004 derived from 2000 World Magnetic Model and accompanying secular change. If annual change is in same direction as variation it is additive and the variation is increasing. If annual change is opposite in direction to variation it is subtractive and the variation is decreasing.

International boundaries as shown are approximate.

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CAUTION

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AIDS TO NAVIGATION

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GENERAL EXPLANATION

LORAN-C FREQUENCY..... 100kHz
PULSE REPETITION INTERVAL
9990..... 99,900 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).

M..... Master
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Z..... Secondary

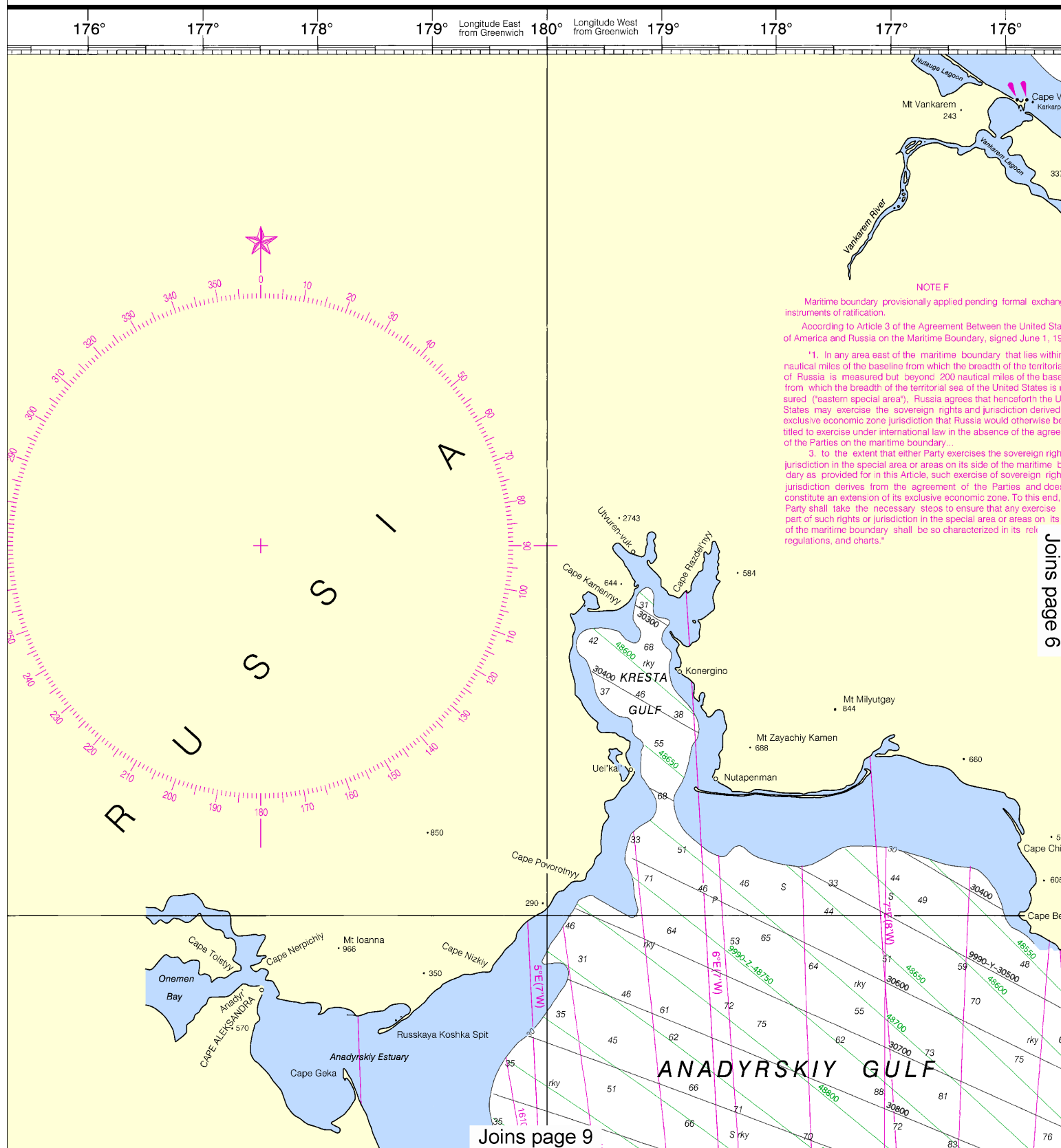
EXAMPLE: 9990-X

RATES ON THIS CHART

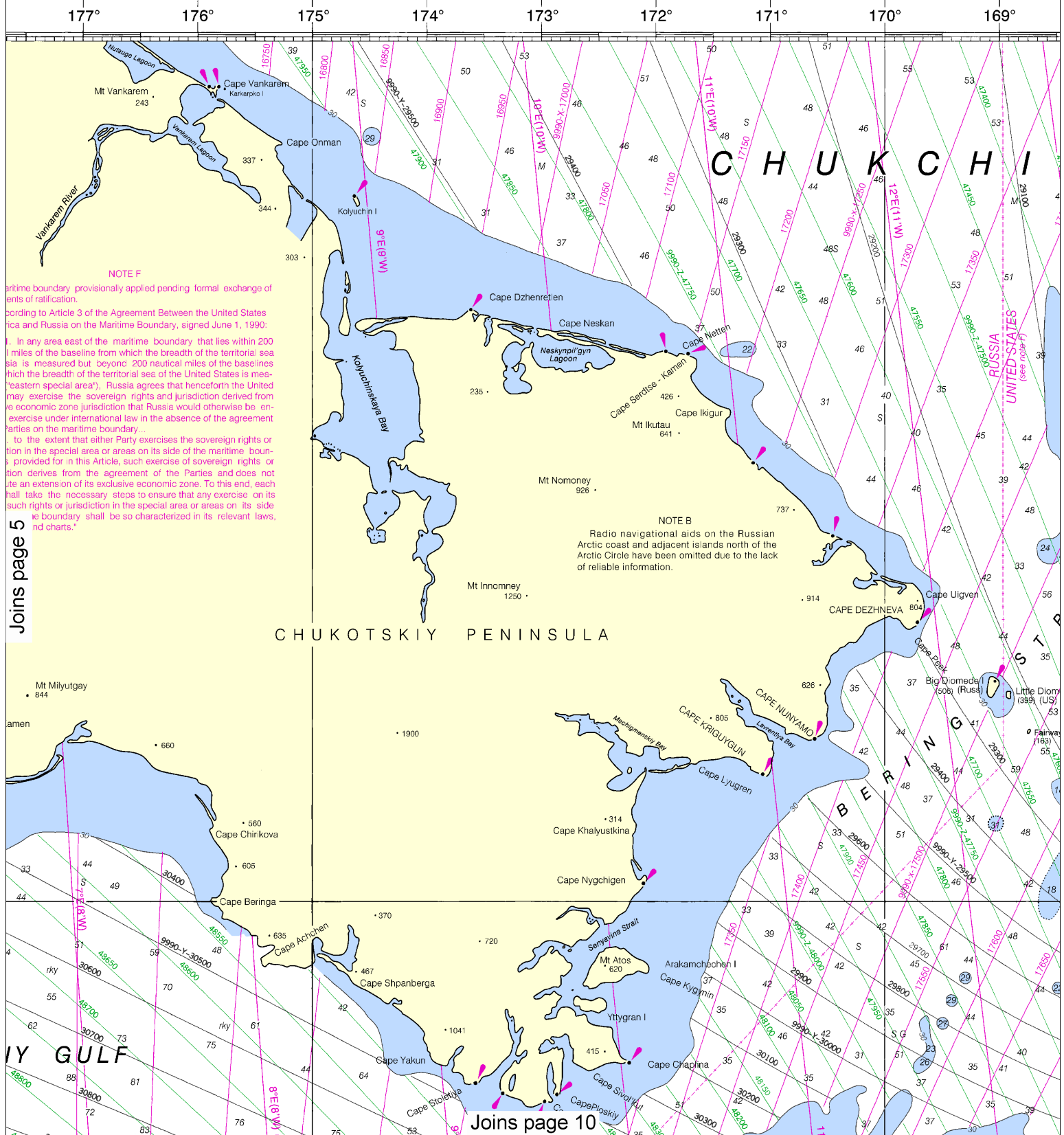
9990-X 9990-Y 9990-Z

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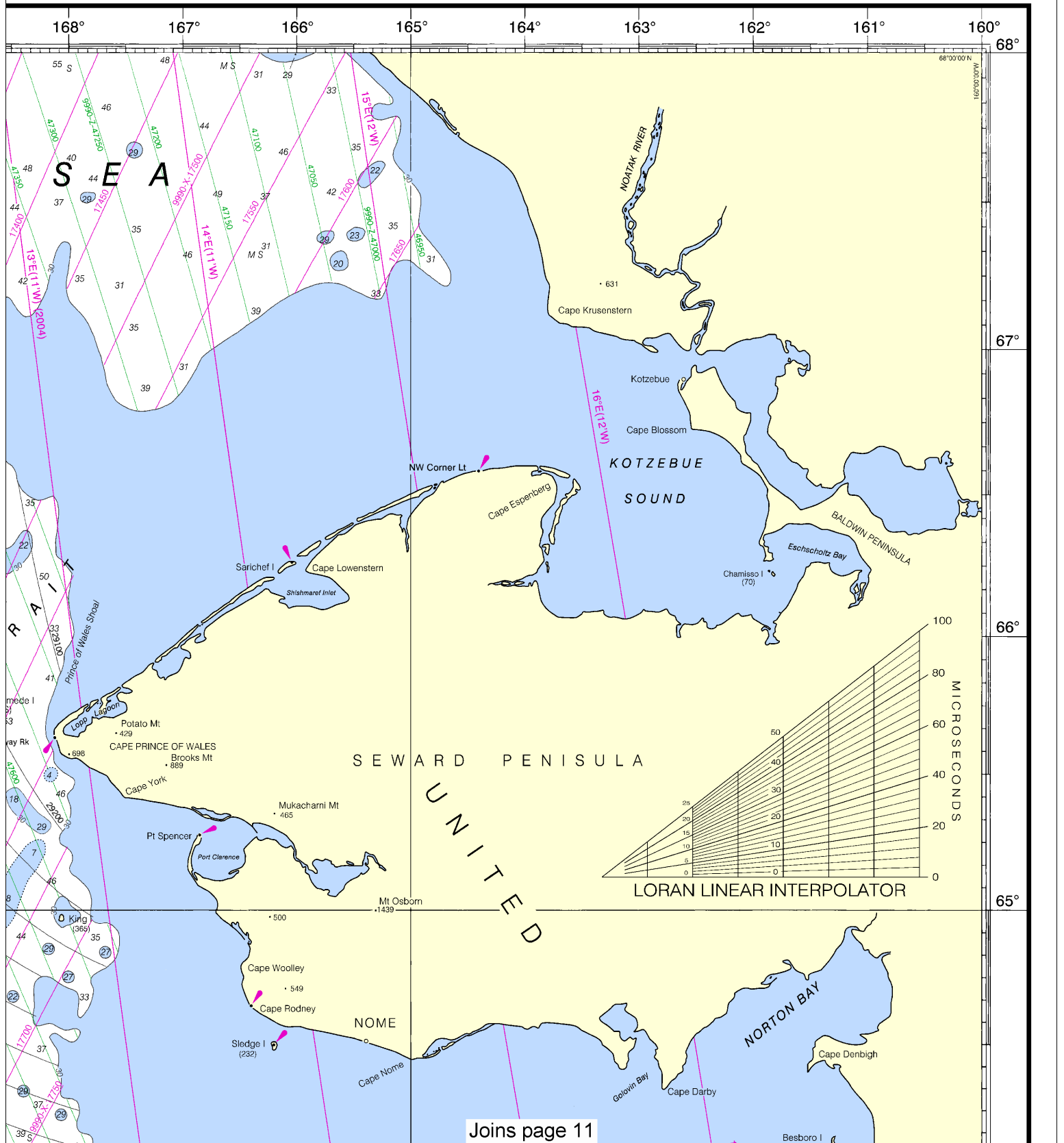
Joins page 8



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:4666667. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



DEPTHS IN METERS



Joins page 11

International boundaries as shown are approximate.

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GENERAL EXPLANATION

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PULSE REPETITION INTERVAL

9990.....99,900 Microseconds

STATION TYPE DESIGNATORS: (Not individual station letter designators).

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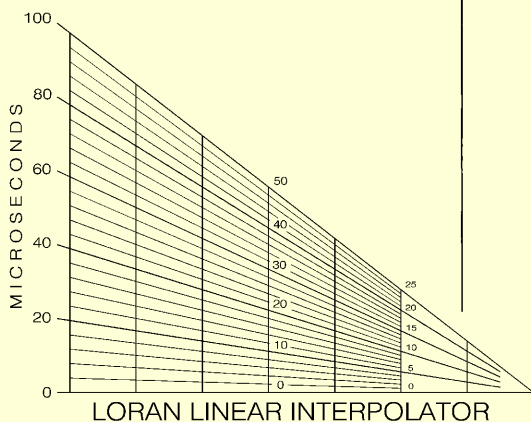
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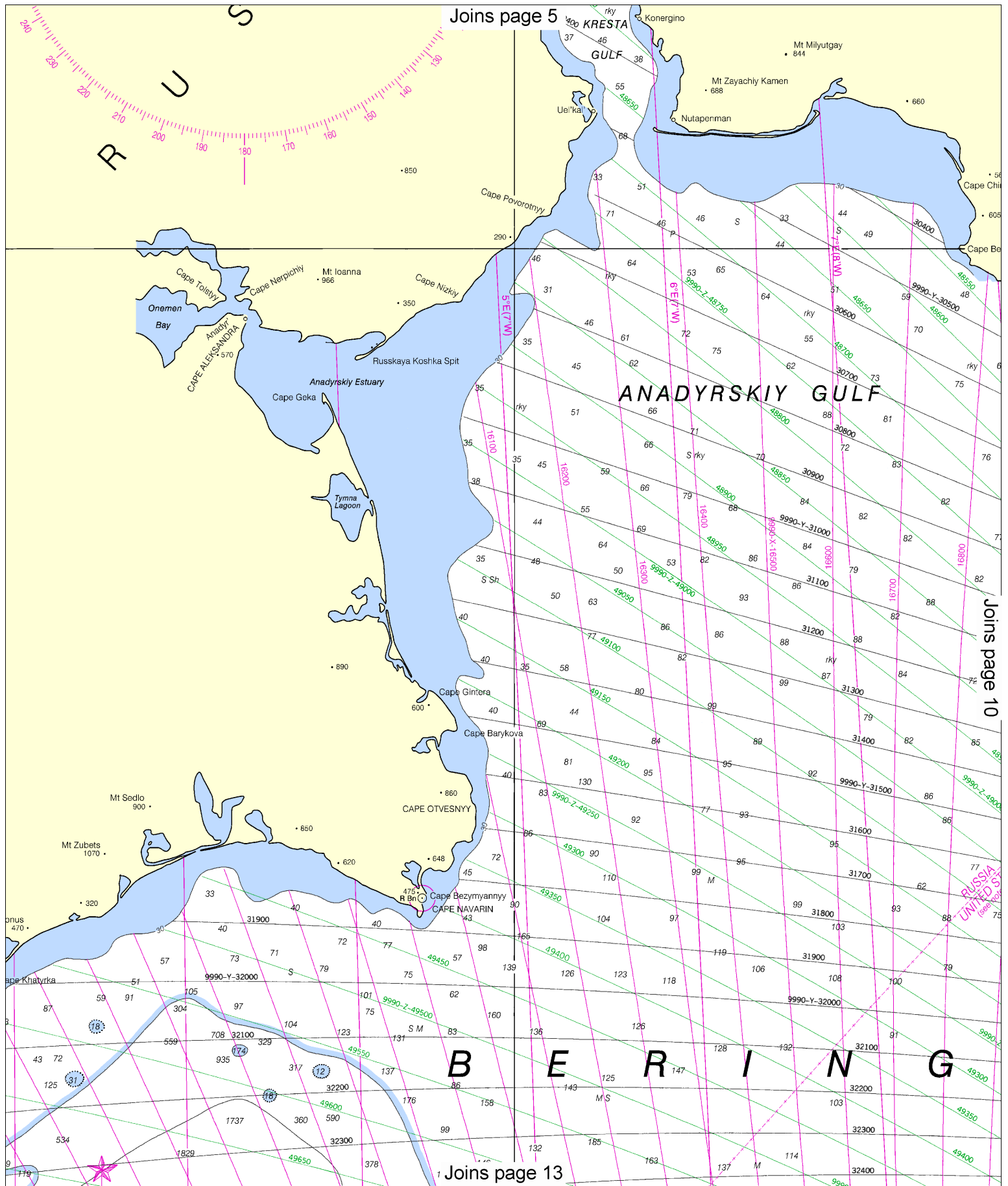
HORIZONTAL DATUM

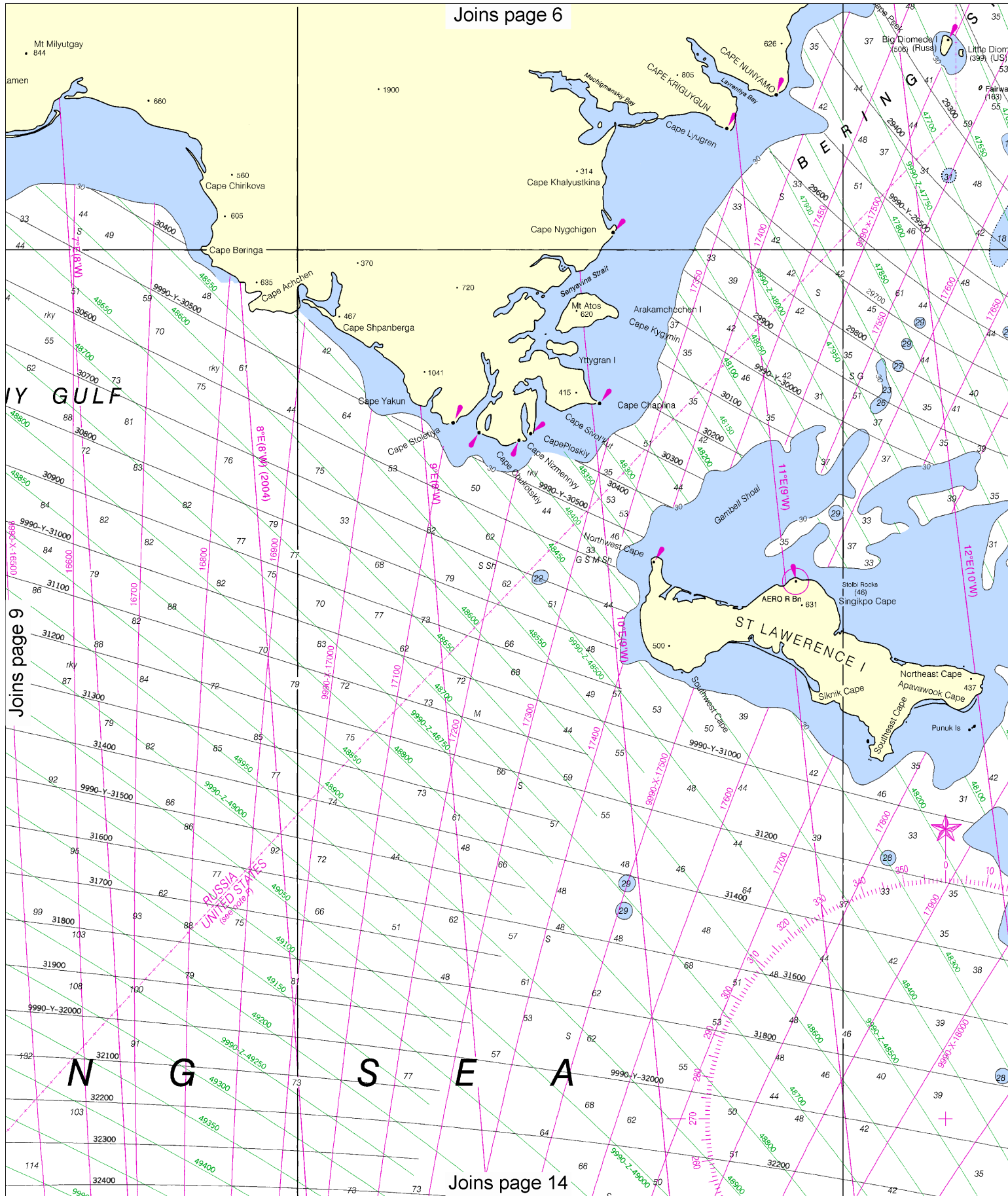
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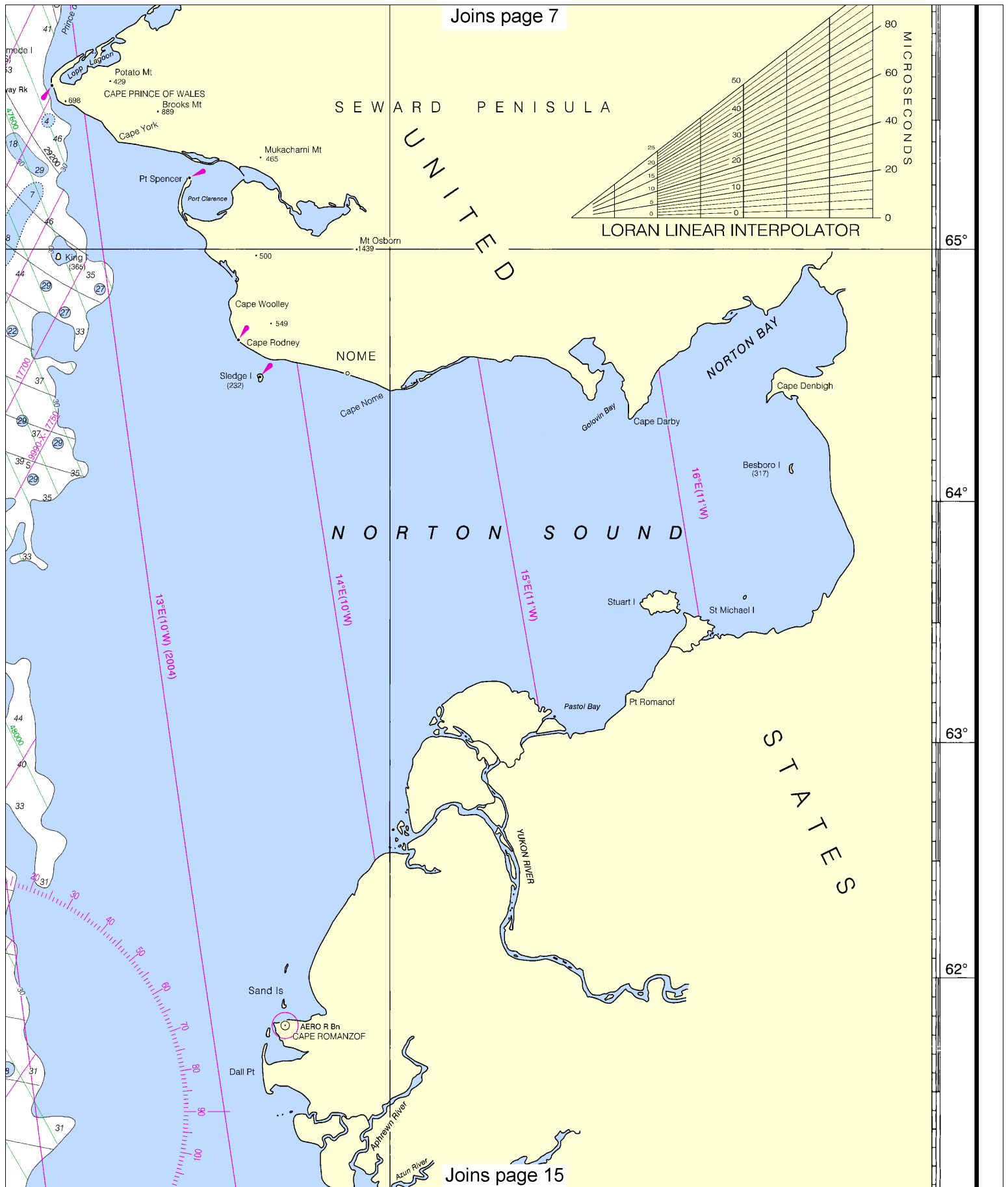


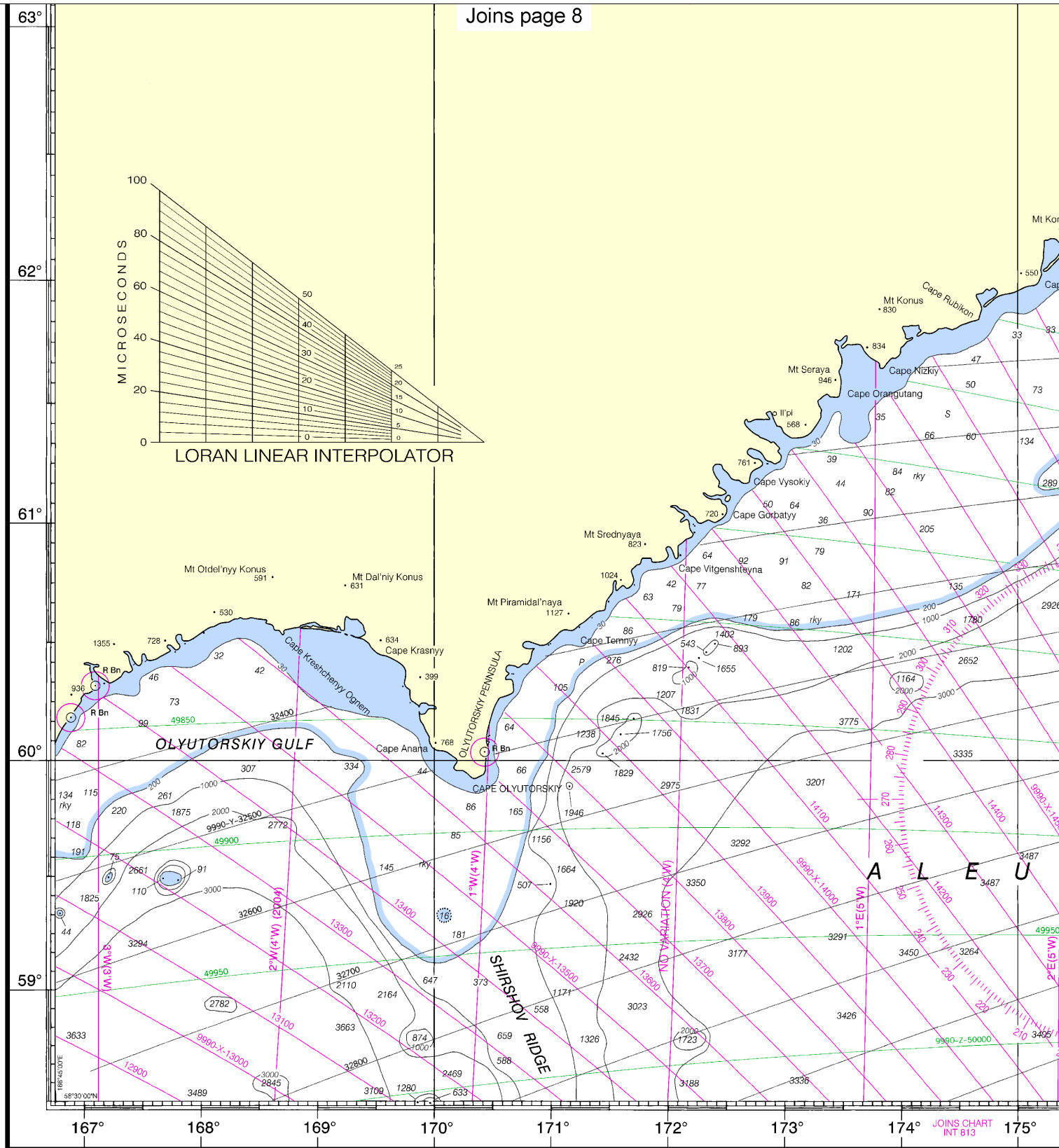
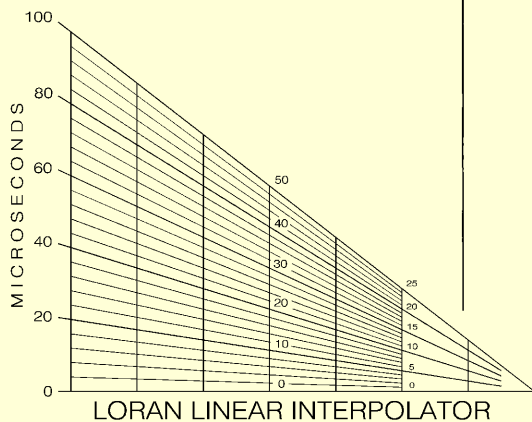
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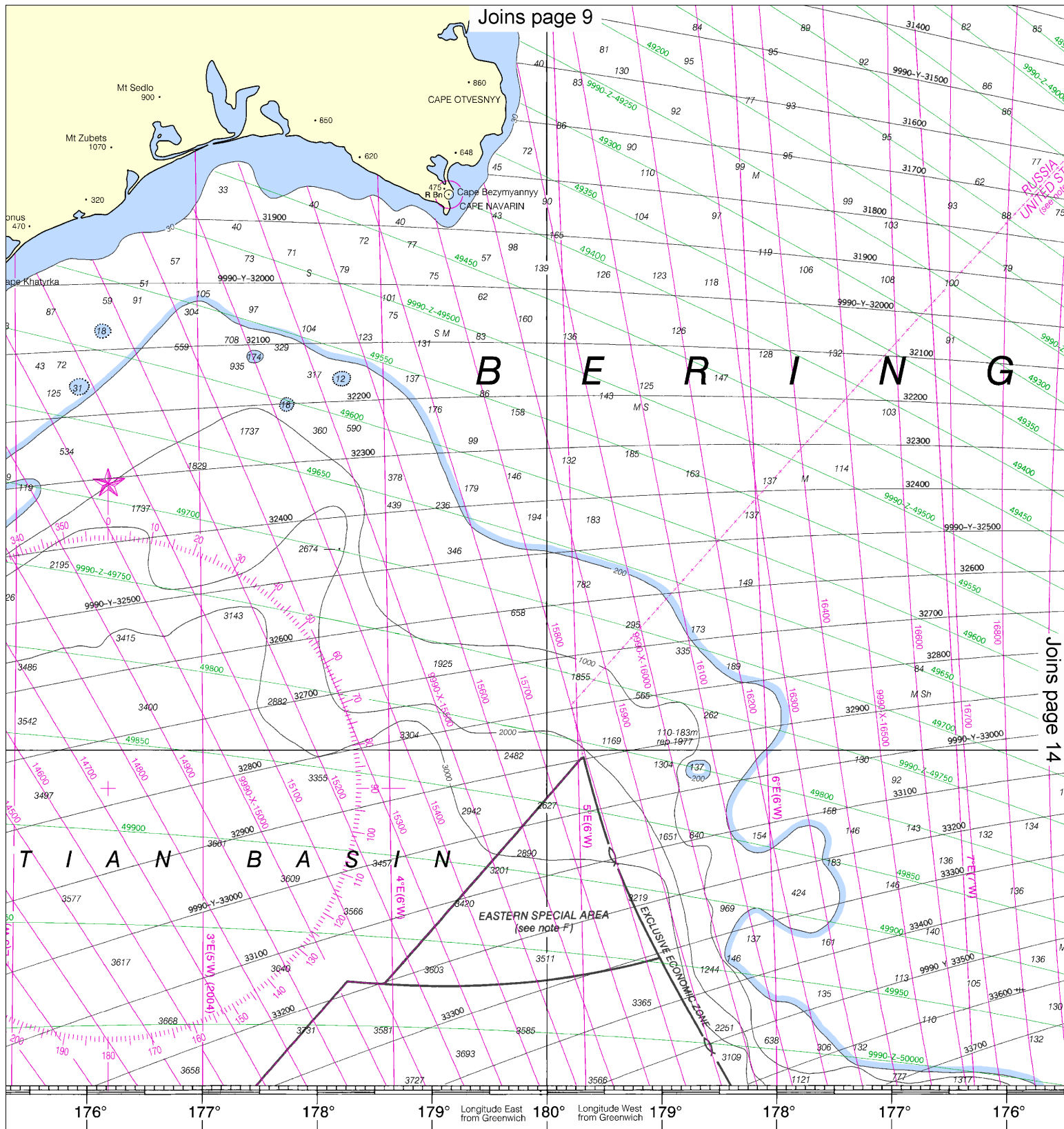


7th Ed., Jan./04 ■ Corrected through NM Jan. 24/04
Corrected through LNM Jan. 6/04

514
LORAN-C OVERPRINTED

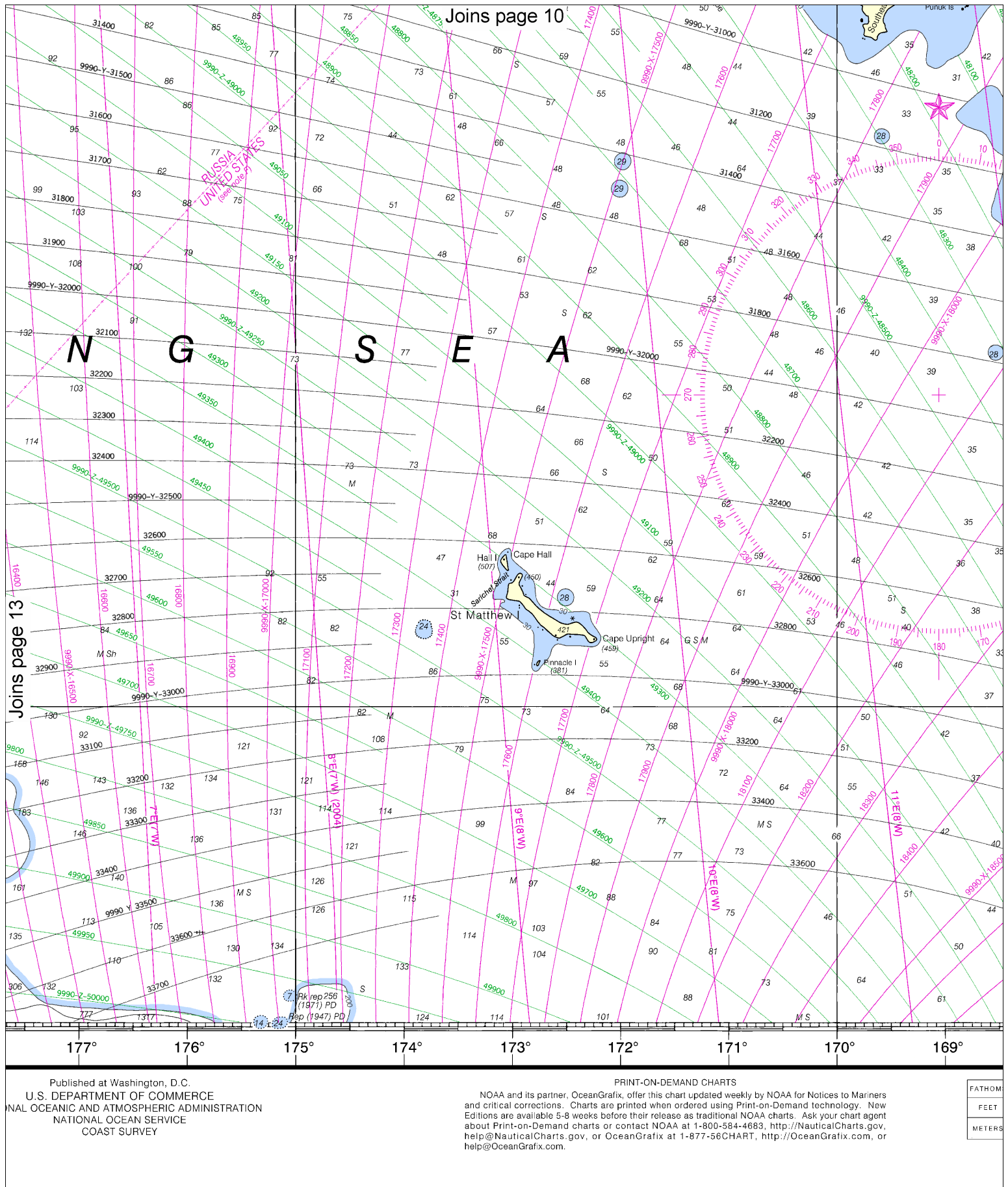
CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

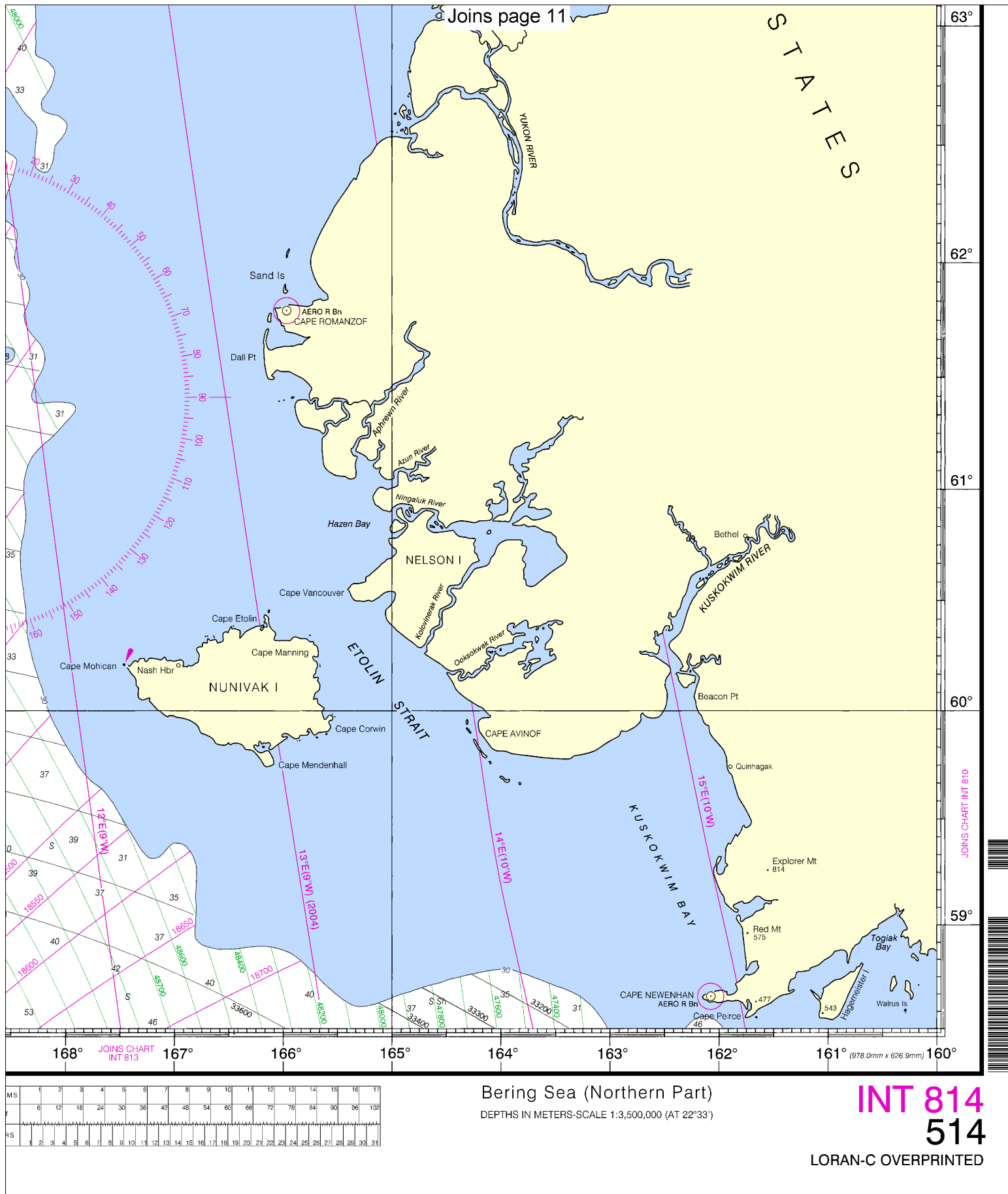
DEPTHS IN METERS



This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

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 U.S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE
 COAST SURVEY







EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Online chart viewer	—	http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



— For the latest news from Coast Survey, follow @nauticalcharts



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey



The Nation's Chartmaker